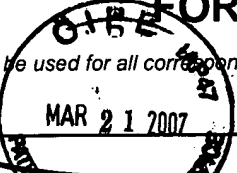



Please type a plus sign (+) inside this box → +

TRANSMITTAL FORM (to be used for all correspondence after initial filing) 	Application Number	10/689,951
	Filing Date	October 22, 2002
	Inventor(s)	HACKMAN et al.
	Group Art Unit	3744
	Examiner Name	M.M. ALI
Attorney Docket Number		98731-000001/US

ENCLOSURES (check all that apply)				
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Letter to the Official Draftsperson and _____ Sheets of Formal Drawing(s) <input type="checkbox"/> Notice of Appeal <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> LETTER SUBMITTING APPEAL BRIEF AND APPEAL BRIEF (w/clean version of pending claims) <input type="checkbox"/> Appeal Communication to Group (Notice of Appeal, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):		
<table border="1"> <tr> <td>Remarks</td> <td></td> </tr> </table>			Remarks	
Remarks				

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name	Gregory P. Brummett	41,646
Signature				
Date	March 21, 2007			

**FEE TRANSMITTAL
for FY 2007**

Effective 2/8/2006. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 200.00

Complete if Known

Application Number	10/689,951
Filing Date	October 22, 2003
First Named Inventor	Gregory HACKMA et al.
Examiner Name	M.M. Ali
Art Unit	3744
Attorney Docket No.	98731-000001/US

MAR 21 2007

U.S. PATENT & TRADEMARK OFFICE

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:

Deposit Account Number 08-0750

Deposit Account Name Harness, Dickey & Pierce, PLC

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.
FEE CALCULATION**1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1011	300	2011	150	Utility filing fee	
1012	200	2012	100	Design filing fee	
1013	200	2013	100	Plant filing fee	
1014	300	2014	150	Reissue filing fee	
1005	200	2005	100	Provisional filing fee	
SUBTOTAL (1)					(\$) 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
9	-20 ** = 0	X 0	= 0
Independent Claims	4	-3 ** = 1	X 200 = 200
Multiple Dependent			= 0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	50	2202	25	Claims in excess of 20
1201	200	2201	100	Independent claims in excess of 3
1203	360	2203	180	Multiple dependent claim, if not paid
1204	200	2204	100	** Reissue independent claims over original patent
1205	50	2205	25	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$200)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	
1403	1000	2403	500	Request for oral hearing	
1452	500	2452	250	Petition to revive - unavoidable	
1453	1500	2453	750	Petition to revive - unintentional	
1462	400	1462	400	Petition fee under 37 CFR 1.17(f)	
1463	200	1463	200	Petition fee under 37 CFR 1.17(g)	
1464	130	1464	130	Petition fee under 37 CFR 1.17(h)	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$0)

4. SEARCH/EXAMINATION FEES

1111	500	2111	250	Utility Search Fee	
1112	100	2112	50	Design Search Fee	
1113	300	2113	150	Plant Search Fee	
1114	500	2114	250	Reissue Search Fee	
1311	200	2311	100	Utility Examination Fee	
1312	130	2312	65	Design Examination Fee	
1313	160	2313	80	Plant Examination Fee	
1314	600	2314	300	Reissue Examination Fee	

SUBTOTAL (4) (\$0)

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Gregory P. Brummett	Registration No. (Attorney/Agent)	41,646	Telephone	(703)668-8000
Signature	<i>Gregory P. Brummett</i>	Date	March 21, 2007		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.



M/S AMENDMENT
Attorney Docket No. 98731-000001/US

IN THE U.S. PATENT AND TRADEMARK OFFICE

APPLICANT(S): HACKMAN et al. CONF. NO.: 4019
APPL. NO.: 10/689,951 ART UNIT: 3744
FILED: October 22, 2002 EXAMINER(S): M.M. ALI
ENTITLED: AUTOMATIC LN2 DISTRIBUTION SYSTEM FOR HIGH-
PURITY GERMANIUM MULTI-DETECTOR FACILITIES

RESPONSE UNDER 37 C.F.R. § 1.197

March 21, 2007

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314
Mail Stop **AMENDMENT**

Sir:

In response to the Decision of the Board of Patent Appeals and Interferences dated February 23, 2007, ("Decision") and the Office Action dated March 16, 2007, ("Action") for the above-identified patent application, please amend the claims as indicated and consider the remarks below. The sections included in this response are as follows:

Amendments to the Claims begin on **page 2** of this paper; and

a **Remarks** section begins on **page 6** of this paper.

03/22/2007 HBERHE 00000123 10689951

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